[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0692; Project Identifier MCAI-2020-01585-T]

RIN 2120-AA64

Airworthiness Directives; Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2018-19-28, which applies to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes; and AD 2014-16-16, which applies to all of those airplane models. AD 2014-16-16 requires, for certain airplanes, retorquing and replacing the pylon lower link fittings, and for all airplanes, repetitively retorquing those fittings. AD 2018-19-28 requires modifying the attaching parts of the pylon lower link fittings. Since the FAA issued AD 2014-16-16 and AD 2018-19-28, the FAA finds it necessary to change the compliance time for the modification. This proposed AD would require an inspection of certain shear pins, replacement if necessary, and revised compliance times for the modification, as specified in an Agência Nacional de Aviação Civil (ANAC) AD, which is proposed for incorporation by reference. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: 202-493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For ANAC material that will be incorporated by reference (IBR) in this AD, contact National Civil Aviation Agency (ANAC), Aeronautical Products Certification Branch (GGCP), Rua Dr. Orlando Feirabend Filho, 230 – Centro Empresarial Aquarius – Torre B – Andares 14 a 18, Parque Residencial Aquarius, CEP 12.246-190 – São José dos Campos – SP, BRAZIL, Tel: 55 (12) 3203-6600; E-mail: pac@anac.gov.br; Internet www.anac.gov.br/en/. You may find this IBR material on the ANAC website at https://sistemas.anac.gov.br/certificacao/DA/DAE.asp. For Embraer service information identified in this proposed AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – Brazil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; Internet http://www.flyembraer.com. For Embraer service information identified in this proposed AD that is applicable to Yaborã Indústria Aeronáutica S.A. Model ERJ 190-100 ECJ airplanes, contact Embraer S.A., Technical Publications Section (PC 560), Rodovia Presidente Dutra, km 134, 12247-004 Distrito Eugênio de Melo - São José dos Campos - SP – Brazil; telephone +55 12 3927-0386; email distrib@embraer.com.br; Internet https://www.mytechcare.embraer.com. You may

view this IBR material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0692.

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0692; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Krista Greer, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email krista.greer@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2021-0692; Project Identifier MCAI-2020-01585-T" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any

personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Krista Greer, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email krista.greer@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2014-16-16, Amendment 39-17940 (79 FR 48018, August 15, 2014) (AD 2014-16-16), which applies to all Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. AD 2014-16-16 requires, for certain airplanes, retorquing and replacing the pylon outboard and inboard lower link fittings, and for all airplanes, that AD also requires repetitive retorquing of the pylon outboard and inboard lower link fittings. The FAA issued AD 2014-16-16 to prevent loss of a shear pin on the pylon outboard and inboard lower link fittings, which could result in failure of the fitting and consequent separation of the engine from the wing.

The FAA also issued AD 2018-19-28, Amendment 39-19429 (83 FR 48935, September 28, 2018) (AD 2018-19-28), which applies to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. AD 2018-19-28 requires modification of the attaching parts of the left-hand (LH) and right-hand (RH) pylon lower link fittings, inboard and outboard positions. The FAA issued AD 2018-19-28 to prevent loss of integrity of the engine pylon lower link fittings, possibly resulting in separation of the engine from the wing. AD 2018-19-28 specified that accomplishing certain actions required by that AD terminated certain requirements of AD 2014-16-16.

Actions Since ADs 2014-16-16 and 2018-19-28 Were Issued

Since the FAA issued ADs 2014-16-16 and 2018-19-28, cracked nuts and an external shear pin with damaged threads were found when the pylon outboard and inboard lower link fittings were retorqued. In addition, the FAA finds it necessary to change the compliance time for the modification of the pylon lower link fitting attaching parts, in order to prevent loss of integrity of the engine pylon lower link fittings.

ANAC, which is the aviation authority for Brazil, has issued ANAC AD 2020-06-02R02, effective November 30, 2020 (ANAC AD 2020-06-02R02) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Yaborã Indústria Aeronáutica S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. ANAC AD 2020-06-02R02 supersedes ANAC AD 2014-07-01 (which corresponds to FAA AD 2014-16-16) and ANAC AD 2017-01-01 (which corresponds to FAA AD 2018-19-28). Model 190-100 SR airplanes are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those airplanes in the applicability.

This proposed AD was prompted by reports of bushing migration, loss of nut torque on the engine pylon lower inboard and outboard link fittings, a loose lower link assembly, and damaged nuts. The existing torque values could cause damage to the nuts, which could lead to loss of the shear pins of the pylon outboard and inboard lower link fittings. In addition, the existing compliance time for the modification of the pylon lower link fitting attaching parts has been found to be inadequate to address the unsafe condition. The FAA is proposing this AD to prevent loss of integrity of the lower link fittings of the engine pylon, which could result in separation of the engine from the wing. See the MCAI for additional background information.

Explanation of Retained Requirements

Although this proposed AD does not explicitly restate the requirements of ADs 2014-16-16 and 2018-19-28, this proposed AD would retain all of the requirements of AD 2014-16-16 and AD 2018-19-28. Those requirements are referenced in ANAC AD 2020-06-02R02, which, in turn, is referenced in paragraph (g) of this proposed AD.

Related Service Information under 1 CFR Part 51

ANAC AD 2020-06-02R02 describes procedures for: reduction of the torque to be applied to the castellated nuts of the external shear pins; inspection of the external shear pin; modification of the attaching parts of the LH and RH pylon lower link fittings, inboard and outboard positions; and repetitive retorquing of the pylon outboard and inboard lower link fittings.

This AD also requires Embraer Service Bulletin 190-54-0013, dated November 27, 2012; and Embraer Service Bulletin 190LIN-54-0004, dated December 20, 2012; which the Director of the Federal Register approved for incorporation by reference as of September 2, 2014 (79 FR 48018, August 15, 2014).

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Explanation of Change to Manufacturer's Name Specified in this NPRM

The FAA has revised references to the manufacturer's name specified throughout this NPRM to identify the manufacturer name as published in the most recent type certificate data sheet for the affected models.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD because the FAA evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in ANAC AD 2020-06-02R02 described previously, as proposed for incorporation by reference, except for any differences identified as exceptions in the regulatory text of this proposed AD, and except as discussed under "Differences Between this Proposed AD and the MCAI."

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, the FAA proposes to incorporate ANAC AD 2020-06-02R02 by reference in the FAA

final rule. This proposed AD would, therefore, require compliance with ANAC AD 2020-06-02R02 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Service information required by ANAC AD 2020-06-02R02 for compliance will be available at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0692 after the FAA final rule is published.

Differences Between this Proposed AD and the MCAI

The applicability of ANAC AD 2020-06-02R02 is limited to certain airplanes of the affected models. However, the applicability of this proposed AD includes all airplanes. Because the affected lock assemblies are rotable parts, the FAA has determined that these parts could later be installed on airplanes that were initially delivered with the acceptable lock assemblies, thereby subjecting those airplanes to the unsafe condition. The FAA has confirmed that the requirement in paragraph (w) of ANAC AD 2020-06-02R02 is applicable to the expanded group of airplanes.

Costs of Compliance

The FAA estimates that this proposed AD affects 85 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2014-16-16	6 work-hours X $85 per hour = $510	$0	$510	Up to $43,350
Retained actions from AD 2018-19-28	Up to 270 work-hours X $85 per hour = Up to $22,950	$3,200	Up to $26,150	Up to $2,222,750
New proposed actions	Up to 274 work-hours X $85 per hour = Up to $23,290	Up to $3,180	Up to $26,470	Up to $2,249,950

The FAA has received no definitive data on which to base the cost estimates for the on-condition actions specified in this proposed AD.

According to the manufacturer, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all known costs in the cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2014-16-16, Amendment 39-17940 (79 FR 48018, August 15, 2014); and AD 2018-19-28, Amendment 39-19429 (83 FR 48935, September 28, 2018); and

b. Adding the following new AD:

Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.): Docket No. FAA-2021-0692; Project Identifier MCAI-2020-01585-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

(1) This AD replaces AD 2014-16-16, Amendment 39-17940 (79 FR 48018, August 15, 2014) (AD 2014-16-16).

(2) This AD also replaces AD 2018-19-28, Amendment 39-19429 (83 FR 48935, September 28, 2018) (AD 2018-19-28).

(c) Applicability

This AD applies to all Yaborã Indústria Aeronáutica S.A. (type certificate previously held by Embraer S.A.) Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Reason

This AD was prompted by reports of bushing migration, loss of nut torque on the engine pylon lower inboard and outboard link fittings, a loose lower link assembly, and damaged nuts, and the need to shorten the compliance time for the modification of the pylon lower link fitting attaching parts. The FAA is issuing this AD to prevent loss of integrity of the lower link fittings of the engine pylon, which could lead to separation of the engine from the wing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

For airplanes identified in Agência Nacional de Aviação Civil (ANAC) AD 2020-06-02R02, effective November 30, 2020 (ANAC AD 2020-06-02R02): Except as specified in paragraphs (h) and (i) of this AD, comply with all required actions and compliance times specified in, and in accordance with, ANAC AD 2020-06-02R02.

(h) Exceptions to ANAC AD 2020-06-02R02

(1) Where ANAC AD 2020-06-02R02 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where ANAC AD 2020-06-02R02 refers to July 3, 2014, this AD requires using September 2, 2014 (the effective date of AD 2014-16-16).

(3) Where ANAC AD 2020-06-02R02 refers to April 25, 2017, this AD requires using November 2, 2018 (the effective date of AD 2018-19-28).

(4) Paragraphs (y), "Alternative methods of compliance (AMOCs)," and (z), "Material incorporated by reference," of ANAC AD 2020-06-02R02 do not apply to this AD.

(5) Where ANAC AD 2020-06-02R02 specifies "replace immediately," this AD requires replacing "before further flight."

(6) Paragraph (w), "Parts installation prohibition," of ANAC AD 2020-06-02R02 does not apply to this AD, except as specified in paragraph (i) of this AD.

(i) Parts Installation Prohibition

As of September 2, 2014 (the effective date of AD 2014-16-16), no person may install a lock assembly identified in Embraer Service Bulletin 190-54-0013, dated November 27, 2012; or Embraer Service Bulletin 190LIN-54-0004, dated December 20, 2012; at the inboard or outboard lower link fitting on any airplane.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal

inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

(3) *Required for Compliance (RC):* Except as specified by paragraph (h) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(3)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

(1) For ANAC AD 2020-06-02R02, contact National Civil Aviation Agency (ANAC), Aeronautical Products Certification Branch (GGCP), Rua Dr. Orlando Feirabend Filho, 230 – Centro Empresarial Aquarius – Torre B – Andares 14 a 18, Parque Residencial Aquarius, CEP 12.246-190 – São José dos Campos – SP, BRAZIL, Tel: 55 (12) 3203-6600; E-mail: pac@anac.gov.br. You may find this IBR material on the ANAC website at https://sistemas.anac.gov.br/certificacao/DA/DAE.asp. For

Embraer service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – Brazil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; Internet http://www.flyembraer.com. For Embraer service information identified in this AD that is applicable to Yaborã Indústria Aeronáutica S.A. Model ERJ 190-100 ECJ airplanes, contact Embraer S.A., Technical Publications Section (PC 560), Rodovia Presidente Dutra, km 134, 12247-004 Distrito Eugênio de Melo - São José dos Campos - SP – Brazil; telephone +55 12 3927-0386; email distrib@embraer.com.br; Internet https://www.mytechcare.embraer.com. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0692.

(2) For more information about this AD, contact Krista Greer, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email krista.greer@faa.gov.

Issued on August 18, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-18110 Filed: 8/23/2021 8:45 am; Publication Date: 8/24/2021]